

21(7)

AUTHORS:

Zinov, V. G., Korenchenko, S. M.

SOV/56-36-2-43/63

TITLE:

The Scattering of  $\pi^-$  - Mesons on Hydrogen at the Energy of 240 Mev, 270 Mev (Rasseyaniye  $\pi^-$  - mezonov na vodorode pri energii 240 MeV, 270 MeV)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 2, pp 618 - 619 (USSR)

ABSTRACT:

The authors investigated the elastic scattering and the exchange scattering of negative pions on hydrogen at the energies of 240 and 270 Mev. They used a negative pion beam of the synchrocyclotron of the OIYaI (United Institute of Nuclear Research) and the measurements were carried out by means of scintillation counters. Liquid hydrogen was used as a target. The values of the differential cross sections found are given in 2 tables (in the present abstract given in an abbreviated form:

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The Scattering of  $\pi^-$ -Mesons on Hydrogen at the Energy  
of 240 Mev, 270 Mev

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(240 $\pm$ 7) Mev			
$\theta^0$ (c.m.s.)	$\left(\frac{d\sigma}{d\omega}\right)_{\pi^- \rightarrow \pi^-}$	$\theta^0$ (c.m.s.)	$\left(\frac{d\sigma}{d\omega}\right)_{\pi^- \rightarrow \gamma}$
39.9	1.60 $\pm$ 0.16	19.7	9.91 $\pm$ 1.21
97.8	0.82 $\pm$ 0.09	114.9	3.47 $\pm$ 0.43
158.1	1.97 $\pm$ 0.19	157.0	4.56 $\pm$ 0.60

270 $\pm$ 7) Mev			
$\theta^0$ (c.m.s.)	$\left(\frac{d\sigma}{d\omega}\right)_{\pi^- \rightarrow \pi^-}$	$\theta^0$ (c.m.s.)	$\left(\frac{d\sigma}{d\omega}\right)_{\pi^- \rightarrow \gamma}$
40.6	1.40 $\pm$ 0.13	20.0	7.78 $\pm$ 0.94
98.8	0.60 $\pm$ 0.06	115.9	2.31 $\pm$ 0.30
158.4	1.56 $\pm$ 0.16	157.4	3.10 $\pm$ 0.42

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If only S- and P- waves are assumed to take part in the scattering, the angular distribution can be written down as

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$$d\sigma/d\Omega = AP_0 + BP_1 + CP_2$$

where  $P_0, P_1, P_2$  are Legendre (Lezhandr) polynomials. The values of the coefficients A, B, C are given in a table. The total cross sections of the interaction of negative pions with hydrogen at the energies of 240 and 270 Mev are equal to

$(48.3 \pm 3.3) \cdot 10^{-27} \text{ cm}^2$  and  $(36.5 \pm 2.4) \cdot 10^{-27} \text{ cm}^2$ , respectively. There are 3 tables.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (United Institute of Nuclear Research)

SUBMITTED: August 26, 1958

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21 (1)

AUTHORS:

Zinov, V. G., Konin, A. D.,  
Korenchenko, S. M., Pontekorvo, B.

SOV/56-36-6-59/66

TITLE:

A Possible Method of Searching for  $\eta^0$ -Mesons (Vozmozhnyy metod poiska  $\eta^0$ -mesonov)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 6, pp 1948 - 1950 (USSR)

ABSTRACT:

Baz', Okun', and Smorodinskiy drew the attention of the authors of the present "Letter to the Editor" to certain singularities in the energy dependence of cross sections. As this promised to be a possibility of detecting  $\eta^0$ -mesons, the authors systematically investigated these cases and give a report on the results obtained. The intensity of a relatively narrow singularity in the energy dependence of the  $\pi^+p$ -interaction cross section might, in principle, indicate the existence of a  $\eta^0$ -meson. It might be expected that in the reactions  $\pi^+ + p \rightarrow \pi^+ + p$  and  $\pi^+ + p \rightarrow \pi^0 + n$  an anomaly occurs in the energy dependence on the threshold of the reaction  $\pi^+ + p \rightarrow \eta^0 + n$ . The

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width of the singularity depends on the interaction radius and may be obtained from the condition  $kR \ll 1$ ; here  $k$  denotes the wave vector of the  $\eta^0$ -mesons formed in the c.m.s. This possibility is briefly discussed. It is assumed that the life of the  $\eta^0$ -mesons is long as against  $\hbar/m c^2$ . The relative amplitude of the singularity  $\Delta\sigma/\sigma$  may amount to some %. The  $\eta^0$ -meson is assumed to differ from the  $\pi^0$ -meson only by the isotopic spin ( $T = 0$ ). The  $\eta^0$ -meson cannot decay quickly into 2 pions because of the conservation of parity, and because of the conservation of the quantum number  $G$  also not into 3 pions, so that the decay  $\eta^0 \rightarrow \gamma + \gamma$ , or, if the mass is sufficiently large,  $\eta^0 \rightarrow \pi + \pi + \gamma$ . If  $m_{\eta^0} > 560 \text{ Mev}/c^2$ , it may also decay into four pions. Finally, several further problems connected with the mass of the  $\eta^0$ -meson are discussed. Ya. B. Zel'dovich pointed out that the existence of an exchange scattering of antiprotons ( $\bar{p} + p \rightarrow \bar{n} + n$ ) indicates a difference between the

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masses of  $\pi^0$ - and  $\eta^0$ -mesons. The authors finally thank L. I. Baz', V. B. Belyayev, B. N. Zakhar'yev, L. B. Okun' and Ya. A. Smorodinskiy for discussions. There are 6 references, 3 of which are Soviet.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: March 23, 1959

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83573

S/056/60/038/005/006/050  
B006/B070

24.6900

AUTHORS: Zinov, V. G., Korenchenko, S. M.TITLE: Charge Exchange Scattering<sup>19</sup> of  $\pi^-$  Mesons by Hydrogen at  
Energies of 240-330 MevPERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,  
Vol. 38, No. 5, pp. 1399-1406

TEXT: From the experimentally found angular distribution of the gamma quanta resulting from pion decay, the authors have determined the angular distribution of  $\pi^0$  mesons. The experimental arrangement is schematically shown in Fig. 1, and is briefly described. A detailed description is given in Ref. 1. The target was liquid hydrogen. The counters were connected partly in coincidence and partly in anti-coincidence. The gamma quanta resulting from  $\pi^0$  decay were recorded at eight angles, and the ratio of the number of coincidences of the type 12346 (Q) to the number of double coincidences of the type 12 (D) was measured. (The figures indicate the counters in Fig. 1.) The difference of the Q/D ratios obtained with and without hydrogen target was determined. Denoting this difference by

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Hydrogen at Energies of 240-330 Mev

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$(Q/D)_{\text{diff}}$ , the differential charge exchange scattering cross section is calculated from the formula

$$(d\sigma/d\Omega)_{\text{diff}} = \frac{(Q/D)_{\text{diff}}}{N\Omega f} \cdot 10^{-6}, \text{ where } N \text{ is}$$

the average number of hydrogen atoms per  $\text{cm}^2$  ( $\approx 0.447 \cdot 10^{24}$ ),  $\Omega$  is the solid angle, and  $f$  the correction for the admixture of muons in the beam (4.5 to 5.5%). The extensive experimental material is clearly shown in tabular form. Tables 1 and 2 give the measured values of  $Q/D$  with and without hydrogen at eight different angles for 240 and 333 Mev  $\pi^-$  mesons. Tables 3 - 6 give differential gamma-production cross sections for charge exchange scattering of 240, 270, 307, and 333 Mev  $\pi^-$  mesons by hydrogen. The experimentally observed production cross section of gamma quanta may be expressed in terms of the coefficients of  $\pi^0$  angular distribution in the

following way:  $(d\sigma^\gamma/d\Omega)_{\text{exp}} = \frac{1 - \beta^2}{(1 - \beta \cos \theta)^2} \sum_{l=1}^{\infty} \epsilon_l(\theta) k_l A_l^0 P_l(\cos \gamma)$ . The

$\alpha$

$\epsilon_l(\theta)$  are defined by formula (5);  $\beta$  is the velocity in the center-of-mass system,  $\theta$  is the emission angle in the laboratory system,  $\gamma$  is the emission angle

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angle in the center-of-mass system of the gamma quanta. The coefficients  $A_1^0$  obtained by solving this equation by the method of least squares are given in Table 7; the  $\epsilon_1(\theta)$  for 240 and 333 Mev are given in Table 8. Using the calculated values of  $A_1^0$  (Table 7, formula (4)), the angular distribution of the  $\pi$  mesons in the center-of-mass system can be obtained from the production cross section of the gamma quanta as the sum of the terms in the first three Legendre polynomials:  $(d\sigma/d\omega)_{\pi^- \rightarrow \pi^0} = A_0^0 + A_1^0 P_1(\cos \theta) + A_2^0 P_2(\cos \theta)$ . The gamma-quantum recording efficiency  $\epsilon$  as a function of the quantum energy,  $E$ , is shown in Fig. 2. The  $k_1$  coefficients of (4) are given in Table 9; the coefficients of the angular distribution of the gamma quanta in the formula  $d\sigma'/d\omega = \sum_1 A_l^0 P_l(\cos y)$  are given in Table 10. The coefficients of angular distribution of the  $\pi^0$  mesons are given in Table 11. There are 2 figures, 11 tables, and 4 references: 3 Soviet and 1 US.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy  
(Joint Institute of Nuclear Research)

SUBMITTED: November 17, 1959  
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S/056/60/038/005/007/050  
B006/B070

24.6900

AUTHORS:

Zinov, V. G., Korenchenko, S. M., Polumordvinova, N. I.,  
Tentyukova, G. N.

TITLE:

Phase Shift Analysis of the Scattering of  $\pi$  Mesons by  
Hydrogen in the Energy Range 240 - 330 Mev

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,  
Vol. 38, No. 5, pp. 1407-1418

TEXT: In the previous paper in this issue (p. 1399), the authors have published the results of ( $\pi^-$ , p) charge-exchange scattering experiments. In the present paper, they give a phase shift analysis using the isotopic spin formalism which depends on the hypothesis of charge independence of the nuclear forces. The formulas are collected in the first part of the paper; in the second part, the method of phase shift analysis is briefly discussed, and the errors are determined. All calculations were performed on the fast electronic computer "Стрела" ("Strela"). The phase shift analysis, taking S and P waves into account (SP analysis), is given in part 3 of the paper. For every value of pion energy, 25 experimental points

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Phase Shift Analysis of the Scattering of  
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 240-330 Mev

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were used: eight differential elastic ( $\pi^+$ ,p) scattering cross sections, seven differential elastic ( $\pi^-$ ,p) scattering cross sections, eight differential exchange scattering cross sections, and the two total scattering cross sections of the positive and the negative pions by hydrogen. Part of the experimental data are taken from the work of A. I. Mukhin, Ye. B. Ozerov, B. Pontekorvo, and N. A. Mitin. The phase shift data for 220-Mev pion energies, taken from a work of Ashkin et al., are given in Table 1. Depending on the kind of phase shift sets, the data are collected in seven variants in Tables 3-6 (for pion energies of 240, 270, 307, and 333 Mev). The angular distributions of the negative pions and gamma quanta for elastic and exchange scatterings calculated from the phase shifts, are shown in Figs. 1-4. The solid curves are drawn from the results of calculation from the formula  $d\sigma/d\omega = A_0 + A_1 P_1(\cos\theta) + A_2 P_2(\cos\theta)$ ; the broken lines are calculated from the SP analysis. The elements of the error matrix for pion energies of 220, 240, 270, 307, and 333 Mev are collected in Tables 7-11. The phase analysis taking S, P, and D waves into account (SPD analysis) is treated in part 4. The contribution of the D-waves ( $l=2$ ) is already significant for  $E_\pi \sim 300$  Mev. The numerical results of

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85677

S/056/60/038/006/019/049/XX  
B006/B070

24.6900 (1138, 1191, 1559)

AUTHORS: Zinov, V. G., Konin, A. D., Korenchenko, S. M.,  
Pontekorvo, B.

TITLE: The Search for the  $\rho^0$  Meson and the Verification of  
Dispersion Relations in  $\pi N$  Scattering

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki,  
1960, Vol. 38, No. 6, pp. 1708 - 1714

TEXT: Results of  $\pi^- p$  interaction cross section ( $\sigma_t^-$ ) measurements  
and of the energy dependence of  $\sigma_t^-$ , as well as a comparison of the  
results with those obtained by other authors are given. The object  
of the study was to look for anomalies in the energy distribution of  
 $\sigma_t^-$  ( $\rho^0$  meson) and to check the Puppi-Stanghellini problem. The  
experimental arrangement is first described (Fig. 1). The target was  
liquid hydrogen in a vessel made of foam polystyrene (walls, 0.8 g/cm<sup>2</sup>).  
The hydrogen density was 0.0708 g/cm<sup>3</sup> so that  $(0.4607 \pm 0.0023) \cdot 10^{24}$

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The Search for the  $\rho^0$  Meson and the  
Verification of Dispersion Relations  
in  $\pi N$  Scattering

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hydrogen nuclei fell in the path of the beam trajectory per  $\text{cm}^2$ . The electronic apparatus was the same as described in Ref. 3; the photo-multipliers used together with the scintillation counters were of the type  $\Phi Y-33$  (FEU-33). Due to the exactly stabilized magnetic field ( $\pm 0.1\%$ ) and the exact measurement of the Hall current (0.5%), the pion momentum could be determined with an accuracy of  $\pm 1\%$ . The energy spread of the beam was  $\pm 0.5$  Mev/cm. The energy loss in hydrogen was  $\sim 3$  Mev.  $6\pi$  was measured for about 50 pion energy values in the range 140-360 Mev with a total accuracy of 1.5 - 2%, but no anomalies could be found which would indicate the existence of a  $\rho^0$  meson. The individual values of measurement are shown in a table; the data for accuracy refer to systematic errors. The results of the study are discussed in detail. The fact that no anomalies exceeding 3 - 4% could be found in the energy dependence of the cross section values for the energy range 140 - 360 Mev, and so no  $\rho^0$  meson having a mass of between 270 and 410  $\text{Mev}/c^2$  could be found, does not mean that no such mesons exist. The data obtained are in conflict with the peaks

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L 00060-66 EWT(1)/EWA(h)

ACCESSION NR: AP5021342

UR/0120/65/000/004/0120/0123  
621.373.44:539.1.073.2

AUTHOR: Korenchenko, S. M.; Nekrasov, K. G.

TITLE: Pulse generators for spark chamber power supply

SOURCE: Pribery i tekhnika eksperimenta, no. 4, 1965, 120-123

TOPIC TAGS: spark chamber, thyatron, pulse generator, nanosecond pulse

ABSTRACT: To improve the time resolution of spark chambers a high voltage pulse must be applied across the chamber electrodes with a shortest possible delay following the passage of the ionizing particle. The charging of the chamber capacitance up to the necessary potential should also be accomplished as quickly as possible. The magnitude of the delay was in the past held down to 120-300 nsec. The present article describes a thyatron generator and control discharger generator circuits for the triggering of large capacity spark chambers. Methods are developed for the shortening of the actuation delays in the high voltage pulse switching circuit down to 30-35 nsec in the case of discharger-containing generators and to 70-80 nsec in the case of thyatron generators. Orig. art. has: 3 figures.

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L 00060-66

ACCESSION NR: AP5021342

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy, Dubna (Joint  
Institute of Nuclear Research)

SUBMITTED: 27Jun64

ENCL: 00

SUB CODE: NP, EE

NO REF SOV: 003

OTHER: 001

Card

*mlh*  
2/2

KUNIN, N.F.; KUNIN, V.N.; GRISHKEVICH, A.Ye.; KORENCHENKO, Ye.S.

Energy absorption by copper during small deformations. Fiz.  
met. i metalloved. 17 no,5:789-792 My '64.

(MIRA 17:9)

1. Belorusskiy gosudarstvennyy universitet imeni Lenina.



*NOVICHENKO, S.K., G.A.*  
PREDEL', A.R.; BISKER, I.M.; MOTORNYI, I.A.; KRASIL'SHIKOV, A.M.;  
KOBENICHEVSKAYA, G.A.

Blood-sucking Diptera of the subfamily Culicinae in the Moldavian  
S.S.R. and neighboring districts in the Ukraine. Med.paraz. i paraz.  
bol.supplement to no.1:56-57 '57. (MIRA 10:1)

1. Iz Odesskogo universiteta imeni Mechnikova i Moldavskoy respubli-  
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PRENDEL', A.R. [Prendel', O.R.], prof.; KORENCHEVSKAYA, G.<sup>A</sup>G. [Korenchevs'ka, H.O.]; STAKHORSKAYA, N.I. [Stakhors'ka, N.I.]

Materials on a study of the fauna, ecology and biology of leeches inhabiting bottom-land waters in the lower Dniester Valley. Pratsi Od. un. Ser.biol.nauk no.8(vol.147):123-125 '57. (MIRA 12:4)  
(Dniester Valley--Leeches)

PREDEL', A.R. [Prezel', O.R.], prof.; <sup>A</sup>KORENCHIEVSKAYA, G.O. [Koren-  
chevs'ka, H.O.]

Materials on a study of bloodsucking mosquitoes in the south-  
eastern part of the U.S.S.R. Pratsi Od. un. Ser.biol.nauk no.8  
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PRENDEL', A.R. [Prendel', O.R.]; KORENCHEVSKAYA, G.A. [Korenchevs'ka, H.O.]

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tekhn.red.

[Economy of Archangel Province; a statistical manual] Narodnoe  
khoziaistvo Arkhangel'skoi oblasti; statisticheskii sbornik.  
[Arkhangel'sk] Arkhangel'skoe knizhnoe izd-vo, 1957. 146 p.

(MIRA 11:3)

1. Archangel (Province). Statisticheskoye upravleniye.
2. Statisticheskoye upravleniye Arkhangel'skoy oblasti (for Kulakova,  
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nik Statisticheskogo upravleniya Arkhangel'skoy oblasti (for  
Massarova)

(Archangel Province--Statistics)

KORENCHY, Lasso

Efficiency of physical work. Eset tud 18 no.40:1268-1270  
6 0 '63.

KORENCHY, Iaszlo

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'63.

KORENCHY, Laszlo

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17 F '63.



KORENDYASEV, A.; LEVKOVSKIY, Ye.

Machine tools "learn" how to work. IUn. tekhn. 4 no.10:33-35 U '59.

(MIRA 13:1)

(Machine tools--Numerical control)

17000

32059

S/024/61/000/006/001/019  
E140/E335

AUTHORS: Kobrinskiy, A.Ye., Korendyasev, A.I. and  
Levkovskiy, Ye.I. (Moscow)

TITLE: Informational criteria for automata classification

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye  
tekhnicheskikh nauk. Energetika i avtomatika.  
no. 6, 1961, 3 - 12

TEXT: The authors consider that this is the first attempt  
to classify automatic machines by the manner of introducing and  
utilizing information - informational criteria. The introduction,  
transformation and utilization of energy is fully mechanized in  
an ordinary machine but the processes concerning information are  
only partially mechanized. These latter processes are also  
completely mechanized in automation. This important circumstance  
should also be reflected in the classification of such machines.  
In addition to information concerning the immediate operation  
a programme is given, in automatic machines, to the machine as  
supplementary information. The authors discuss the well-known  
comparative advantages and disadvantages of the analogue and  
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Informational criteria ....

digital methods of supplying a programme. The greater  
potential precision, the independence of the programme from  
factors dictated by the structure and design of the machine and  
the fact that digital programmes can be generated in high-speed  
computers away from the machine to be controlled are decisive  
advantages for the digital method. The programme constitutes a  
set of input commands, which must be supplemented by information  
fed-back from the work in process, involving dimensional,  
kinematic, dynamic, temperature, electrical and other parameters,  
both from the machine elements and the work, as well as the  
ambient medium. The present attempted classification, however,  
does not concern these factors but only those criteria directly  
related to the logical scheme of the machine, the number of  
streams of information circulating in it and their possible  
combinations according to the type of automaton. In the block  
diagram of an automaton one of the basic organs is the means for  
introducing the programme into the automaton and for reading it.  
This naturally implies the existence of a programme memory.  
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Although the program contains all the information necessary for carrying out a given technological process, it may be in a form in which it cannot be transmitted to the machine mechanisms. A translation unit may be necessary which interprets the instructions in the programme, so that a control unit is also necessary in the machine. The circuits directly affecting the useful operation of the machine constitute the "operator". These three elements, programme, control, operator, constitute the basic circuit of an open-loop automatic-control system. It is not always possible to establish such a clear division of functions in a machine but the more complicated a machine, the sharper become the divisions of this structural scheme. The open-loop block diagram is characterized by a single stream of information, flowing from the programme to the operator. This scheme may be used when the programme is generated and realized by mechanical circuits composed of rigid couplings, when the programme is given in digital form and realized in pulse operations and when there are not high requirements regarding precision. In remotely controlled systems or when high precision is required, this is no longer possible.

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It becomes necessary to utilize a second stream of information obtained from measurements carried out on the machine or the work piece. This second stream of information constitutes a feedback and represents a wide class of automata. Several structural schemes are possible using feedback. The information is used immediately and continuously in classical feedback systems; the use of digital control permits a more indirect use of this information, for example - to readjust the automatic machine only when the parameters of the finished product approach or pass a certain tolerance limit. Feedback based on measurements of machine or work parameters taken during the course of the work cannot take into account deformations due to mechanical or thermal deformations and the like. Such information can be obtained only on the finished product, when it is too late to utilize it for the current operation. A third information<sup>stream</sup> is introduced to overcome this difficulty, which is used to adjust the parameter of the control unit itself. In other words, the third stream of information leads to the concept of a self-adjusting automaton. Such machines are capable of generalizing, storing and

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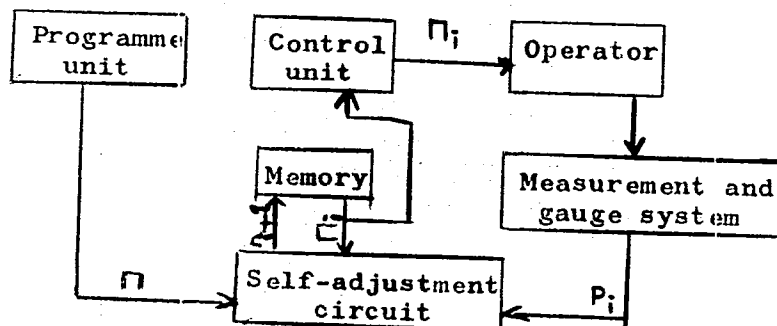
utilizing the experience of their own work. Machines with three streams of information have much more varied possible structures than machines with two streams. The authors expect that, in the future, even more complicated types of automata will be developed. The authors mention various applications of automatic machines to illustrate these points. Among these are a Soviet dynamic balancer, consisting of a balancing machine, and a drilling-machine. A second example concerns a machine for preselection of balls for ball bearings, as a function of the inner and outer diameters of the ball-bearing races. A third example, which is discussed in great detail, is a self-adjusting digital milling-machine control. Another self-adjusting machine mentioned is a hot-rolling mill for thin steel sheets. The block diagram of the self-adjusting milling-machine control is given herewith: X

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Fig. 4:



The discussion of this automaton centres around the question of the form in which the results of measurements are to be used. Various possibilities are presented, such as the comparison between the absolute values prescribed by the programme and absolute values measured on the machine, measurement of the

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Informational criteria ....

difference between the programmed value and the value obtained on the machine, etc. In the view of the authors, such differences, leading to different logical structures, are significant in the study of such machines.

There are 4 figures and 10 references: 8 Soviet-bloc and 2 non-Soviet-bloc. The English-language reference mentioned is: Ref. 7: Peter J. Farmer, Automatic Machine, Aircraft Production, January, 1958.

SUBMITTED: April 4, 1961

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ACCESSION NR: AP4028989

S/0280/64/000/002/0175/0181

AUTHOR: Kobrinskiy, A. Ye. (Moscow); Korendyasev, A. I. (Moscow)

TITLE: New mechanical power amplifier

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 2, 1964, 175-181

TOPIC TAGS: amplifier, mechanical amplifier, power amplifier, wormgearing  
mechanical amplifier, self-locking mechanical amplifier

ABSTRACT: The adaptation of a conventional self-locking wormgearing for amplifying purposes has been made by the authors (Author's Certificates 123829, 136143, 125112, 124772). A power-motor torque is permanently applied to the worm wheel, while the control-motor rotor is coupled with the worm. Due to the self-locking feature, the wormgearing is at rest unless the control motor is energized by a control signal. Two modes of operation are distinguished:  
(1) trigger, when the control motor develops a torque just enough to unlock the

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ACCESSION NR: AP4028989

gearing; and (2) traction, when the control motor supplies a part of the power to the worm-wheel shaft. Both modes are considered, and amplifier characteristics are plotted. An experimental device consisting of a hydraulic ram coupled to the worm wheel and an electric motor coupled to the worm was used to verify the theoretical characteristics. Orig. art. has: 8 figures and 22 formulas.

ASSOCIATION: none

SUBMITTED: 07Jul63

DATE ACQ: 30Apr64

ENCL: 00

SUB CODE: CG, IE

NO REF SOV: 001

OTHER: 002

Card 2/2

L 64381-65

ACCESSION NR: AP5021633

UR/0284/65/000/013/0116/0116

AUTHORS: Sakayan, A. R.; Kobriniski, A. Ye.; Korandiyasev, A. I.

TITLE: A method for determining and recording displacements. Class 74, No. 172656

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 116

TOPIC TAGS: recording device, displacement, electric measurement

ABSTRACT: This Author Certificate presents a method for determining and recording displacements of objects by reproducing marks on a plate fixed to one of these objects. To produce a continuous record of large displacements and to increase the scale of the record, the relative displacement of the objects is converted into electrical impulses by means of a curved track formed on the plate and by a needle of a reproducing head moving along this track. The head is connected to a sensitive element of a gauge whose signals are transmitted to the recording device.

ASSOCIATION: none

SUBMITTED: 02Jul63

NO REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: IE

Card 1/1 *lla*

S/030/62/000/005/004/006  
B104/B108

AUTHORS: Kobrinskiy, A. Ye., Korendyasev, A. I., Levkovskiy, Ye. I.

TITLE: Mechanical power amplifier

PERIODICAL: Akademiya nauk SSSR. Vestnik, no. 5, 1962, 83-85

TEXT: The action of a self-braking power amplifier is illustrated by the example of a self-braking worm gear. A servomotor drives the axle of the worm; a torque acts on the shaft of a wheel. When the rotor of the servomotor is released by a signal given to the servomotor input the shaft will rotate. Such a mechanical power amplifier has an amplification factor  $k = \tan \varphi / \tan(\varphi - \alpha)$ , where  $\alpha$  is the pitch angle of the worm,  $\varphi$  is the angle of friction. This factor is limited by instabilities of the friction factor of the worm gear. The use of such mechanical amplifiers in gear systems is discussed. A clearance-free adjustment of the worm gear maintains a constant phase difference between input and output signal. There are 2 figures.

Card 1/1

KOBRINSKIY, A.Ye. (Moskva); KORENDYASEV, A.I. (Moskva); LEVKOVSKIY, Ye.I.  
(Moskva)

Use of informational indices in the classification of automats.  
Izv. AN SSSR, Otd. tekhn. nauk. Energ. i avtom. no.6:3-12 N-D '61.

(MIRA 14:12)

(Automatic control)  
(Milling machines)

KOBRINSKIY, A.Ye.; KORENDYASEV, A.I.; LEVKOVSKIY, Ye.I.

Mechanical power amplifiers. Vest. AN SSSR 32 no.5:83-85

My '62.

(MIRA 15:5)

(Amplifiers (Electronics))

KORNEYASOV, G.V.

Automatisation of the zinc concentrate roasting process in boilings.  
Tsvet.met. 29 no.5:30-35 My '56. (MLRA 9:8)

1. Giprotevetmet.  
(Zinc--Metallurgy)

SOV/137-58-8-16351

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 16 (USSR)

AUTHOR: Korendyasev, G.V.

TITLE: ~~Automation of the Operation of Gas-cleaning Devices in Non-~~  
ferrous Metallurgy (Current Status and Prospects) [ Avtoma-  
tizatsiya raboty ustanovok pyleulavlivaniya v tsvetnoy metal-  
lurgii (sostoyaniye i perspektivy) ]

PERIODICAL: Sb. materialov po pyleulavlivaniyu v tsvetn. metallurgii.  
Moscow, Metallurgizdat, 1957, pp 72-105

ABSTRACT: Methods of automatic control and adjustment for gas-clean-  
ing departments and units in nonferrous metallurgy are exam-  
ined. Instances of automation of individual units are cited, with  
analysis of the major arrangements planned and realized at the  
various plants. Backwardness in the field of complex automa-  
tion is acknowledged, and measures necessary for the further  
progress and perfection of automatic monitoring, control, and  
regulation of gas-cleaning processes are set forth.

M.L.

1. Gases--Cleaning 2. Industrial equipment--Control systems

Card 1/1

SOV/137-59-1-112

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 16 (USSR)

AUTHOR: Korendyasev, G. V.

TITLE: Automation of Furnaces in the Lead-zinc and Copper Industry  
(Avtomatizatsiya pechey v svintsovo-tsinkovoy i mednoy promyshlennosti)

PERIODICAL: V sb.: Materialy Soveshchaniya po vopr. raboty pechey tsvetn. metallurgii i razvitiya pirometallurg. protsessov. Moscow, 1957, pp 323-335

ABSTRACT: The integral automation of furnace assemblies is not yet practically applied in non-ferrous metallurgy. Work was performed on the equipping of furnaces with apparatus for control, automation of regulating thermal schedules of reverberatory and refining furnaces in the copper industry, and the automatic regulation of separate parameters of other furnace aggregates. The author examines the state of automation of furnace installations in the copper and lead-zinc industry and determines the prospects and trends of the development of automation. Layouts are adduced of various design solutions for the automation of furnaces for the roasting of ore

Card 1/2



SOV/137-59-1-112

Automation of Furnaces in the Lead-zinc and Copper Industry

concentrates in a fluidized-solids bed, furnaces for smelting, refining, and slag sublimating, and Waelz-process furnaces, etc.

Yu. O.

Card 2/2

14(5)

SOV/127-59-3-3/22

**AUTHORS:** Korendiyasev, G.V. and Rapota, V.F., Engineers

**TITLE:** The Automation of Production Processes in Mines of Non-Ferrous Metallurgy. (Avtomatizatsiya proizvodstvennykh protsessov na rudnikakh tsvetnoy metallurgii.)

**PERIODICAL:** Gornyy zhurnal, 1959, Nr 3, pp 11-17 (USSR)

**ABSTRACT:** Giprotsvetmet Institute has developed plans for the automation of some of operations in the Degtyarka, Dzhezkazgan and Mirgali~~msay~~ Mines of non-ferrous metals. 1) Compression installations: automation systems were developed for compression stations of mines equipped with aggregates 55V and 2VG. Imperfect piston compressors are being modernized according to plans developed by the Mytishchenskiy mashinostroitel'nyy zavod (Mytishchi Machine Building Plant). In this scheme all operations are automatic except the starting of the first and the switching-off of the last compressor. All expenses involved in connection with the automation and modernization of the station with the output capacity of 500 cubic m/sec will be

Card 1/3

SOV/127-59-3-3/22

The Automation of Production Processes in Mines of Non-Ferrous Metallurgy.

recuperated within 6 months. 2) Water-pumping installations: an automated test station has been working since 1955 at the Mirgalimsay Mine. It comprises seven 1C NMK-2 pumps with an output of 1000 cubic m/hour, with a pressure head of 240 m; five pumps have asynchronous short-circuited motors of 680 kw capacity, and 2 kilovolts voltage; the other two pumps have phase rotor motors of the same capacity. 3) Heating installations; each installation is composed of 2 groups of heaters with one fan each. When the temperature of the open air is minus 15-20°, only one group works, the second being switched on at lower temperatures. Both groups are permanently heated with steam, the amount of which, automatically regulated, depends on the temperature and the quantity of the air passing through the heater (figure 2). 4) Ventilating doors; equipment constructed at the

Card 2/3

SOV/118-59-3-15/22

28(1), 25(5)

AUTHOR: Korendyasev, G.V., and Chayanov, V.A., Engineers

TITLE: Automation Problems in Mining Enterprises (Voprosy avtomatizatsii gornorudnykh predpriyatiy)

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, 1959, Nr 3, pp 46-48 (USSR)

ABSTRACT: The authors are of the opinion, that complex automation of all phases of technological processes in mining, demands installation of equipment, fully adapted for such automation, and that present day equipment in mining is insufficient. They analyze thoroughly the capacity of compressors, compressor parts, explain the significance of mining combine equipment, control systems, stress the deficiency of loading and unloading operations and the poor quality of the material from which the machines are manufactured. They draw the following conclusions: The improvement of mechanical mining equipment has to be carried out in two ways: Modernization of already existing machines and installation of new equipment.

Card 1/2

KORENDYASEV, G.V.

Experimental automation of roasting processes of zinc concentrates  
in a fluidized bed. Sbor.mat.po avtom.proizv.prots.i disp. no.5:  
52-61 '60. (MIRA 14:4)

1. Giprotsvetmet.

(Fluidization) (Automation)

(Zinc—Metallurgy)

KORENDYASEV, G.V.

Automation of induction furnaces for melting cathode zinc.

Sbor.mat.pz avtomatizatsiya prots.1 disp. no.5:62-71 '60.

(MIRA 14:4)

1. Giprotsevtmet.

(Zinc--Electrometallurgy)

(Automation)

DIOMIDOVSKIY, Dmitriy Aleksandrovich; ZUBKOV, G.A., red.; BUROV,  
A.I., red.; KORENYYASEV, G.V., red.

[Control and automation of processes in nonferrous metal-  
lurgy] Kontrol' i avtomatizatsiia protsessov v tsvetnoi  
metallurgii. Moskva, Metallurgiya. Pt.1. 1965. 376 p.  
(MIRA 18:7)

KORENDYASEV, G.V.

Comparative testings of new reagent feeders for automating  
the process of ore flotation. Gor. zhur. no. 12:57-58  
D '65.

(MIRA 18:12)

1. Konstruktorskoye byuro TSvetmetavtomatika.



KORENDYASOV, M.A., kandidat meditsinskikh nauk

Significance of peripheral hemorrhage in surgery of aneurysms. Vest.  
khir. 75 no.3:51-55 1p '55. (MLNA 8:7)

1. Iz kliniki gosspital'noy khirurgii No.1 (nach.-prof. N.V.Smirnov)  
Voyenno-morskoy meditsinskoy akademii. Leningrad, Fontanka, d. 106,  
1-ya gosspital'naya khirurgicheskaya klinika VMTA.

(ANEURYSM, surgery,  
perop. peripheral hemorrh.)

(HEMORRHAGE,  
peripheral, in surg. of aneurysm)

KORENDYASHEV, M.A., major med. slushby, kand.med.nauk

Injuries of the knee meniscus. Voep.med.shur. no.3:19-23 Mr '57.  
(Knee, wounds and injuries, (MIRA 11:3)  
meniscus (Rus)

KORENDYASEV, M.A.  
KORENDYASEV, M.A., kand.med.nauk

Filling a bone cavity with plaster of paris in local fibrous  
osteodystrophy. Vest.khir. 79 no.10:123-126 0 '57. (MIRA 10:12)

1. Iz gosspital'noy khirurgicheskoy kliniki No.2 (nach. - prof. Ye.V.  
Smirnov) Voenno-meditsinskoy ordena Lenina akademii im. S.M.Kirova.  
Adres avtora: Leningrad, Zagorodnyy pr., d.47, 2-ya gosspital'naya  
khirurgicheskaya klinika Voenno-meditsinskoy ordena Lenin akademii  
im. S.M.Kirova.

(BONE AND BONES, abnorm.

osteodystrophy, ther., plaster of paris plomage of  
bone cavity (Rus))

(PLASTER OF PARIS

plomage of bone cavity in osteodystrophy (Rus))

KORENDYASOV, M.A., mayor meditsinskoy sluzhby, kand.med.nauk

Late tendoplasty of flexors of the fingers. Voen.-med.shur. no.12:  
50-52 '59. (MIRA 14:1)

(FINGERS—SURGERY)

(TENDONS—TRANSPLANTATION)

KORENDYASHEV, M.A., kand.med.nauk

Significance of plaster of paris plomhage in the healing of bony cavities and defects; clinical experimental study. Ortop., travn. i protez. 20 no.5:18-23 My '59. (MIRA 12:9)

1. Iz kafedry gosptal'noy khirurgii No.2 (nach. - prof.Ye.V. Smirnov) Voenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova.

(BONE DISEASES, exper.

eff., of plaster of paris plomhage on bone tissue regen. in cavities & defects in dogs & rabbits (Rus))

(PLASTER OF PARIS, eff.

plomhage, on bone tissue regen. in cavities & defects indogs & rabbits (Rus))

KORENDYASEV, M.A.

Effect of various pyrimidines on the regeneration of bone tissue.  
Vest. khir. 84 no. 2:88-92 F '60. (MIRA 14:1)  
(PYRIMIDINE) (BONES—DEGENERATION AND REGENERATION)

KORENDYASEV, M.A., kand.med.nauk, podpolkovnik med.sluzhby; KATONIN, V.A.

Alloplasty of the tendons. Voen.-med. zhur. no. 2:58-59 F '61,  
(TENDONS—SURGERY) (MIRA 14,12)

PUTOV, N.V.; VIKHRIYEV, B.S.; KORENDYASEV, M.A.; KOBLENTS-MISHKE, A.I.;  
POSEVIN, D.I.

Diagnosis and treatment of limited suppurative pericarditis  
following operations for mitral stenosis. Grud. khir. 6 no.4:  
20-25 JI-Ag '64.

(MIRA 184)

1. Kafedra gospi'tal'noy khirurgii (nachal'nik -- prof. I.S.Kolesnikov)  
Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova, Leningrad.  
Adres avtorov: Leningrad K-9, Botkinskaya ul. d.23, Klinika gospi'tal'-  
noy khirurgii Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.



SAVINTSEV, P.A.; KORENDYASEV, M.I.

Contact melting of an ice - salt system. Izv. vye. ucheb. zav.;  
fiz. no.4:169-170 '59. (MIRA 13:3)

1. Tomskiy politekhnicheskii institut imeni S.M. Kirova.  
(Ice)

SHABOLTAS, B.B.; DAVYDOV, V.V.; KORENDYASEV, V.V.; MITRAKOV, V.I.

Use of chemical solutions in sinking an inclined shaft.  
Shakht. stroi. 8 no.2:29-30 F '64. (MIRA 17:3)

1. Aleksandriyskiy ugol'no-gornorudnyy kombinat (for Shaboltas). 2. Institut gornogo dela imeni A.A. Skochinskogo (for Davydov, Korendyasev, Mitrakov).

DAVYDOV, V.V., kand. tekhn. nauk; KORENDYASEV, V.V., inzh.; MITRAKOV, V.I.,  
inzh.

Synthetic resin for decreasing the inrush of water during  
shaft sinking. Shakht. stroi. 8 no.4&12-13 Ap'64 (MIRA 17:7)

1. Institut gornogo dela imeni A.A. Skochinskogo.

ARKHAROV, V.I.; KORENDYASEVA, Z.V.

Regions of coherent rearrangement of crystal lattices during  
martensite transformations in carbon steel. Fiz.met.i metalloved.  
13 no.1:97-106 Ja '62. (MIRA 15:3)

1. Institut fiziki metallov AN SSSR.  
(Steel—Metallography) (Crystal lattices)

MARGOLIN, I.S.; KORENDYASOVA, L.V.; STRUZHANOVA, L.A.; KALININA, M.A.

Parellel operation of negative terminals of a trolley bus contact network. Prom. energ. 16 no.2:16 F '61. (MIRA 14:3)  
(Trolley busses--Wires and wiring)

MEL'KUMOV, Lev Georgiyevich; BOGOPOL'SKIY, Boko Khaimovich;  
BERLOVSKIY, Vyacheslav Mikhaylovich; KOVALEV, Yuriy  
Sergeyevich; KOZIN, Yuriy Vladimirovich; NAYMAN, Artur  
Yefimovich; FEL'DMAN, Yelizar Samoylovich; SHUVAYEV,  
Anatoliy Andreyevich [deceased]; KORENDYAYEV, G.V., otv.  
red.; BELOV, V.S., red. izd-va; LOMILINA, L.N., tekhn.  
red.; IL'INSKAYA, G.M., tekhn. red.

[Automatic control of mine compressor stations] Avtomati-  
zatsiya shakhtnykh kompressornykh stantsii. Moskva, Gosgor-  
tekhizdat, 1963. 151 p. (MIRA 16:8)  
(Automatic control) (Air compressors)

KORENEK, J.

"The Problem of Damage to Pines Caused by Snow and Wind During the Winter of 1951-52 in Polana." p. 232 (POLANA, Vol. 9, No. 10, Oct. 1953) Praha, Czechoslovakia

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4  
April 1954. Unclassified.

KORENEK, J.

Exotic oaks of the Kysihybel Arboretum  
near Banska Stiavnica. P. 488.

BIOLOGIA. (Slovenska akademie vied) Bratislava CZECHOSLOVAKIA

Vol. 10, No. 4, 1955

SOURCE: East European Accession List (EEAL) Library  
of Congress. Vol. 5, No. 1. January, 1956.



ROBERT, J.

Arboretums in Banske Stiasynice; their history and composition. p.242.  
BIOLOGIA. (Slovenska akademie vied) Bratislava. Vol. 11, no. 4, 1956.

SOURCE: East European Accessions List, (EEAL), Library of Congress,  
Vol. 5, no. 12, December 1956.

KORENEK, J.; TURCEK, F.

D. Randuska's Stancovistny prielohy v lesnickaj praxi (Analysis of a Locality in Practical Forestry); a book review, p. 246. BIOLOGIA. (Slovenska akademie vied) Bratislava, Vol. 11, no. 4, 1956.

SOURCE: East European Accessions List, (EEAL), Library of Congress, Vol. 5, no. 12, December 1956.

Czechoslovakia/Forestry - Forest Biology and Typology.

K-2

Abs Jour: Ref Zhur - Biol., No 19, 1958, 86845

Author : Korenek, Joseph

Inst : Not given

Title : The Course of Development of Self-Sown Spruce  
During the Year of Seed Release

Orig Pub: Les, 1956, 12, No 4, 165-167

Abstract: The results of research (in Slovakia) by the author on the times of release of spruce seeds do not agree with data in the literature. The seeds can fall out of the cones during the whole year, depending on the temperature and the humidity. In dry years the seeds fall out all at once in spring, in wet years the cones do not open for a long time, hence the seed release times are delayed. A calculation of the fall and sprouting of spruce seeds was made in 1952-

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Czechoslovakia/Forestry - Forest Biology and Typology.

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000824620002-7

Abs Jour: Ref Zhur - Biol., No 19, 1958, 86845

Abstract: 1953 in spruce groves at 1200 meters above sea level. As a result of a dry spring and summer, the seeds began to sprout only at the end of summer and beginning of autumn, and the young growth died during the winter. The data on seed fall per 100 square meters in the bumper-crop year 1955 for 80-year old spruce cultures (region of the city of Bansk-Sht'yavnits, 720-750 meters above sea level) is as follows: August - 2735, September - 2212, October - 1060 specimens. In connection with the lengthening of the periods of spruce seed release, a proposal is made to consider natural regeneration at the end of vegetation.--S. M. Stoyko.

Card 2/2

Korenek, J.

Korenek, J. New possibilities in machine-tool design. p. 51.

Vol. 5, no. 2, Feb. 1957

STROJIRENSKA VYROBA

TECHNOLOGY

Czechoslovakia

Sol East European Accessions, Vol. 6, May 1957  
No. 5

Korenek, J.

The oldest oak in the area of Banska Stiavnica. p. 555.

ETIOLOGIA, Bratislava, Czechoslovakia, Vol. 14, no. 7, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 10, 1959 -Oct.  
Uncl.

L 18836-65 EWT(d)/EWT(m)/EPF(n)-2/EWP(c)/EWP(k)/EWP(h)/EPA(bb)-2/T/EWP(1)  
 P-1/Pu-1 AEDC(b)/SSD  
 ACCESSION NR: AP4044865 Z/0038/64/000/009/0312/0322

AUTHOR: Hulovec, Jan (Gulovets, Ya.); Juza, Jan (Yuza, Ya.); Komarek, Arnost; Korenec, Jan (Kerzhenek, Ya.); Wagner, Karel (Vagner, K.); Krizek, Vladimir (Krisizhek, V.); Tomcik, Jan (Tomchik, Ya.) 8

TITLE: Development and construction problems of the first Czechoslovak nuclear reactor power plant 14

SOURCE: Jaderna energie, no. 9, 1964, 312-322

TOPIC TAGS: nuclear power plant, reactor, pressure vessel, power output, fuel element

ABSTRACT: This article reports on the principal scientific research which was necessary in connection with the testing of the reliability of all the important units of the first Czechoslovak nuclear electric power plant of 150-Mw power output, and the present stage of the development and production of the technological installations and of the construction of the power plant. The plant uses gas cooling and a heavy-water reactor with natural metallic uranium and is being built at the present time in the CSR. The relatively large output design of the Czechoslo-

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ACCESSION NR: AP4044865

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\*vak plant has delayed construction as it has been necessary to design, construct, and test many parts of the technological installation with a view to much greater perfection than would have been the case were the plant of low-power output. More time will be required than originally planned to put the functional units and the whole plant into operation, since the unit of greater power was designed with a view to greater economy of operation, and has by far a more complicated construction than units whose main purpose is the testing and proving of design types in operation. Great attention has been given to the design and development of the fuel-element changing mechanisms; its individual units as well as the whole prototype mechanism have been functionally tested. The mechanisms of all the control rods and safety rods have been subjected to all-round, exhaustive testing on a special stand with models of the mechanisms of a 1:1 scale at full operating temperature and CO<sub>2</sub> coolant pressure. Many tests were made on models of the reactor shielding. Inasmuch as the technological installations of the plant are in a developmental stage, the discussion is limited to future prospects from the point of view of technical performance figures, of which the most important is the maximum unit power that can be generated. Given the fuel element concept described

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here, it is not necessary to reckon with either a sharply increased active zone height or with increased thermal power drawn from the unit volume of active zone, which is already fairly high in the first electric power plant ( $10 \text{ Mw/m}^3$ ). It may be expected, therefore, that the 200-Mw power stage will have a pressure chamber of 6.4 m average diameter, and the 400-Mw stage a pressure chamber of 8.8 m diameter. The height of the pressure chamber would not at the same time be substantially changed. The pressure chamber of the reactor of the first electric power plant cannot be transported fully assembled. It was designed, therefore, so that it could be assembled at the plant construction site. The engineering and operation reliability of the steam generator were tested on a full-scale model of one section. Adjustable blade flow control in exhaust and sealing (packing) systems was tested on a 1:1 scale blower model. The effect of thermal shock on the piping in the case of emergency reactor shutdown, and the possibility of using turbine units from classical electric power plants under the operating conditions prevailing in the nuclear plant in view of the high moisture content of the vapor, was investigated. Another nuclear electric power plant with a reactor of a 200-Mw unit power output is being designed and planned on the basis of the design and development experience discussed here. Increased unit power output of this type of

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L 18836-65

ACCESSION NR: AP4044865

3

reactor will obviously depend on changes in the concept of the core of the reactor itself, in particular of the fuel element. This problem is now under study. Orig. art. has: 19 figures.

ASSOCIATION: [Hulovec, Juzu, Komarek, Korenek, Wagner] Zavody V. I. Lenina, Pilsen (Lenin Plant); [Krisek] Prvni brnenska strojirna, Zavody Klementa Gottwalda (First Brno Machine Building Plant, Klement Gottwald Plant); [Tom:ik] Jaderna elektraren (Nuclear Electric Power Generating Plant)

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NO REF SOV: 001

OTHER: 009

Card 4/4

KORENEK, O.A. [Koren'ok, O.A.]; DUDKO, O.M., assistant

Organization of care for children entering kindergarten for the first time. Ped., akush. i gin. 20 no.2:28-31 '58. (MIRA 13:1)

1. Kafedra organizatsii okhrany zdorov'ya (zav. - dots. I.P. Pigida) Kiyevskogo ordena Trudovogo Krasnogo Znameni meditsinskogo instituta im. akad. A.A. Bogomol'tsa (direktor - dots. I.P. Alekseyenko) i yasli No.48 (zav. yaslyami - O.A. Korenek) Pecherskogo Rayzdrovotdela g. Kiyeva.

(CHILDREN--CARE AND HYGIENE) (KINDERGARTEN)

KORENENKO, E.

Beets and Beet Sugar

Mechanized row-crop cultivation of sugar beets. Kolkh. proizv. 12, no. 4, April 1952

Monthly List of Russian Accessions, Library of Congress, August, 1952. UNCLASSIFIED.

KORENENKO, Ye., Eng.

Agricultural Machinery

Sowing sugar beets by machinery, Kolkh. proizv. No. 3, 1953.

9. Monthly List of Russian Acquisitions, Library of Congress, June 1953, Uncl.

KORENENKO, Ye., Eng.

Beets and Beet Sugar

Advance sowing practice of sugar beet. MTS 13, No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

1. KORENENKO, YE.
2. USSR (600)
4. Cultivators
7. Row cultivation of sugar beets, MTS 13 no. 5, 1953.
9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

KOREMENKO, Ye.S., inzh.

Organic mineral fertilizers are important factors in increasing  
crop capacity. Izobr. v SSSR 3 no.3:16-17 M.: '58. (MIRA 11:3)  
(Fertilizers and manures)

KORENENKO, Ye.S.

Lighting of grain-harvesting units. Izobr.i rats. no.7:36 J1 '58.

(MIRA 11:9)

(Harvesting machinery) (Electricity in agriculture)



KORENENKO, Ye., inzh.

Machines for seed-grain preparation. Izobr. 1 rats. no.1:26  
Ja '59. (MIRA 12:1)  
(Grain-handling machinery)

KOREMENKO, Ye.S., insh.

New potato harvesters. Traft. 1 sel'khozmas. no.1:35-37  
Ja '59. (MIRA 12:1)

(Potato digger (Machine))

~~KORENENKO, Y.~~ inzh.; CHUMACHENKO, I., inzh.; KOCHUBEY, I., inzh.;  
ZAKHARCHENKO, A., inzh.

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